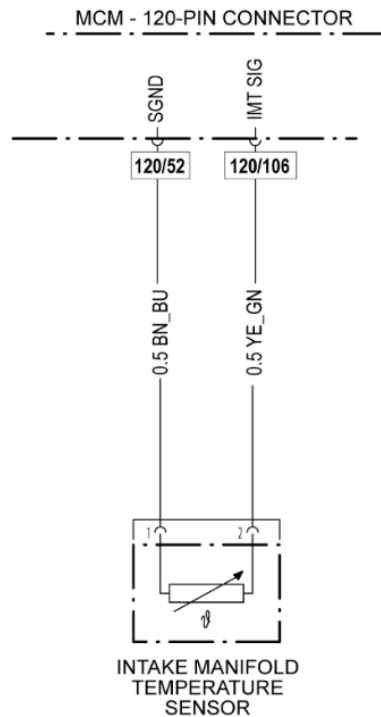


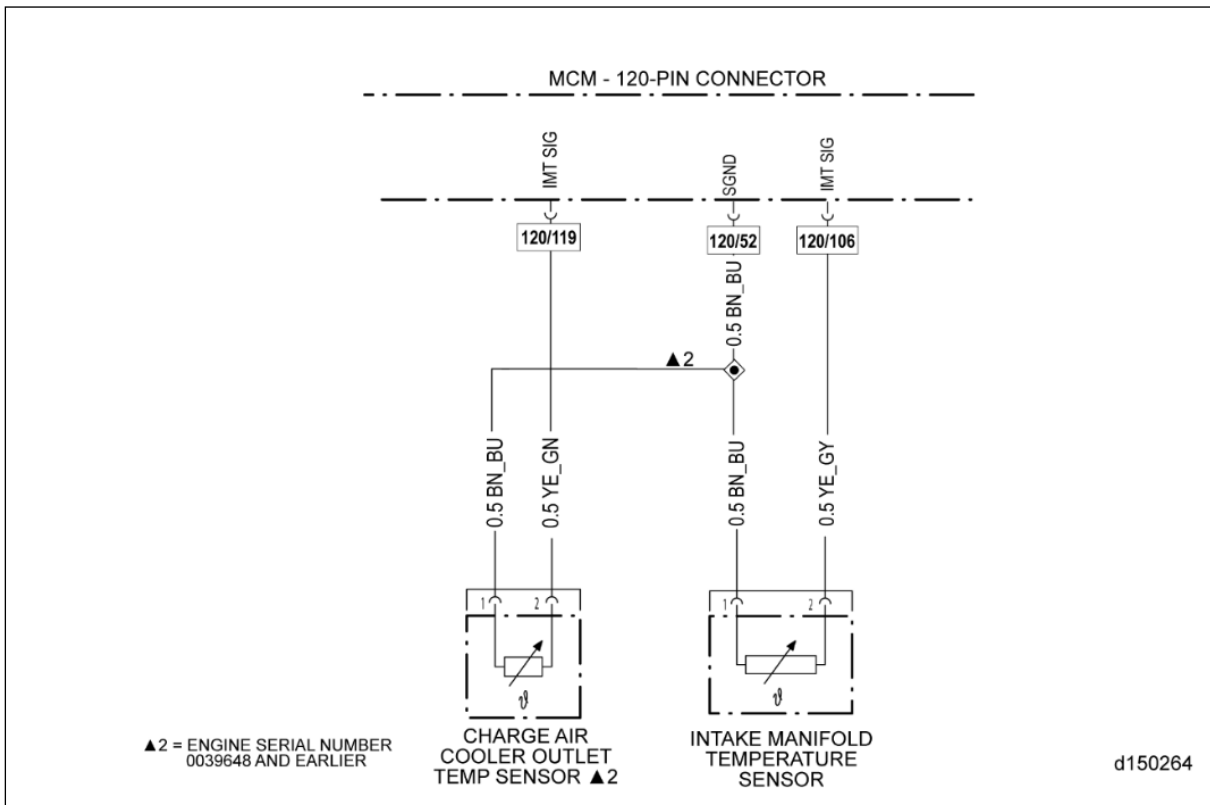
## 271.1 SPN 1636/FMI 3 - EPA10

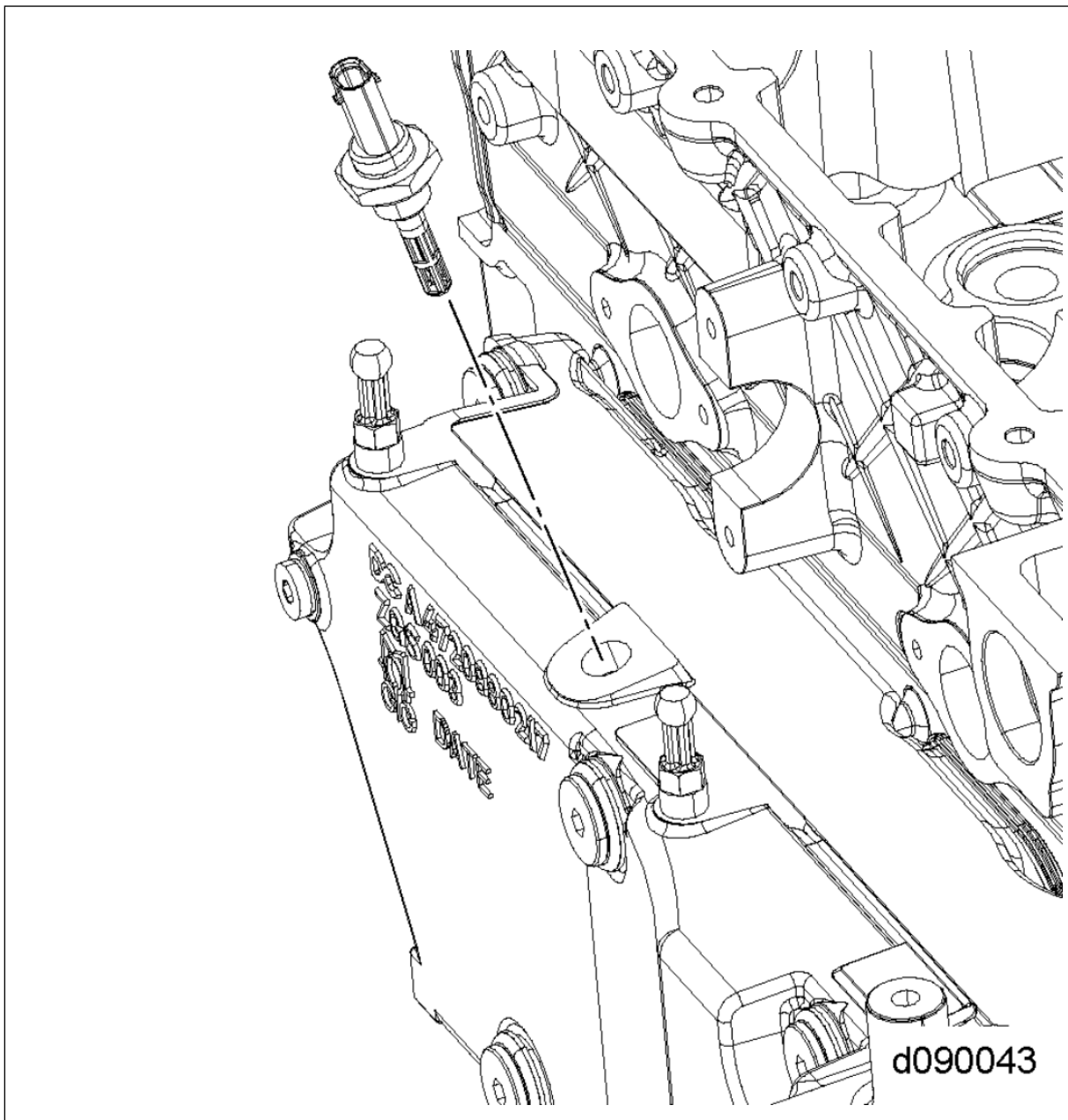
Intake Manifold Temperature Circuit Failed High

SPN 1636/FMI 3	
Description	Intake Manifold Temperature Circuit Failed High
Monitored Parameter	Intake Manifold Temperature Sensor
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 25%
Verification	Engine Idle (1 minute)



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Check as follows:

1. Connect DiagnosticLink . [Go to step 2.](#)
2. Turn the ignition ON (key ON, engine OFF). [Go to step 3.](#)
3. Check for multiple fault codes. Are fault codes for the Charge Air Cooler temperature sensor also present?
  - 3.a Yes; repair the wire between pin 52 of the 120-pin Motor Control Module (MCM) harness side connector to pin 1 of the charge air cooler temperature sensor connector (harness side) and pin 1 of the intake manifold temperature sensor connector (harness side). Verify repair.
  - 3.b No; [Go to step 4.](#)
4. Turn the ignition OFF. [Go to step 5.](#)
5. Disconnect and inspect the Intake Manifold Temperature sensor connector. Are there any spread or damaged pins?
  - 5.a Yes; repair as necessary. Verify repair.

- 5.b No; [Go to step 6.](#)
- 6. Turn the ignition ON (key ON, engine OFF). [Go to step 7.](#)
- 7. Measure the voltage between pins 1 and 2 of the Intake Manifold Temperature connector (harness side). Is the voltage between 2.5 and 3.5 volts?
  - 7.a Yes; replace the Intake Manifold Temperature sensor, [Refer to section "Removal of the Intake Manifold Air Temperature Sensor"](#) . Verify repair.
  - 7.b No; [Go to step 8.](#)
- 8. Measure the voltage between pin 2 of the Intake Manifold Temperature connector, harness side and ground. Is the voltage between 2.5 and 3.5 volts?
  - 8.a Yes; repair the wire between pin 1 of the Intake Manifold Temperature Sensor connector and pin 52 of the 120-pin Motor Control Module (MCM) connector. Verify repair.
  - 8.b No; repair the wire between pin 2 of the Intake Manifold Temperature sensor connector and pin 106 of the 120-pin MCM connector. Verify repair.